

Cyclophilin A, 1-165 aa

Human, His tagged, Recombinant, E.coli

Cat. No. IBCYP0702

Synonyms: Peptidylprolyl isomerase A, PPIA, CYPA, CYPH

NCBI Accession No.: NP_066953

Description: Cyclophilin A (also known as Peptidylprolyl isomerase A, PPIA) encodes a member of the peptidyl-prolyl cis-trans isomerase family. They are highly-conserved cytoplasmic enzymes that accelerate protein folding. Cyclophilin A is also incorporated into many viruses, including HIV-1, where it has been speculated to be involved in functions such as viral assembly and infectivity. Recombinant human PPIA, was expressed in *E.coli* and purified by using conventional chromatography techniques.

Form: Liquid. In 20 mM Tris-HCI buffer (pH 8.0) containing 20 mM NaCI, 0.5 mM	
DTT, 10% glycerol	(kDa)
Molecular Weight: 20kDa (185aa), confirmed by MALDI-TOF	57 40
Purity: > 95% by SDS - PAGE	28
Concentration: 1 mg/ml (determined by Bradford assay)	18
Endotoxin Level: < 1.0 EU per 1 μ g of protein (determined by LAL method)	8.5
Biological activity: Specific activity is > 650 nmol/min/mg, and is defined as the	15% SDS-PAGE (3ug)
amount of enzyme that cleaves 1nmole of suc-AAFP-PNA per minute at 37C in Tris-	
HCI pH 8.0 using chymotrypsin.	
Sequences of amino acids:	

MGSSHHHHHH SSGLVPRGSH MVNPTVFFDI AVDGEPLGRV SFELFADKVP KTAENFRALS TGEKGFGYKG SCFHRIIPGF MCQGGDFTRH NGTGGKSIYG EKFEDENFIL KHTGPGILSM ANAGPNTNGS QFFICTAKTE WLDGKHVVFG KVKEGMNIVE AMERFGSRNG KTSKKITIAD CGQLE

General references:

Holzman, T.F., et al, (1991). J. Biol. Chem. 266(4): 2474-2479

Berthoux L, et al, (2005). Proc Natl Acad Sci U S A. 102(41):14849-53

Storage: Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles

